

MARKED-UP AMENDED CLAIMS

3. (Amended) A method according to claim 1 [or claim 2] wherein determining comprises:
determining a time of passage of a trailing edge of the sheet as a time at which detection of motion ceases.
4. (Amended) A method according to [any of the preceding claims] claim 1 wherein detecting motion comprises optically detecting whether motion exists at the position.
5. (Amended) A method according to [any of the preceding claims] claim 1 wherein the threshold for determining onset of motion is different from the threshold for determining cessation of motion.
6. (Amended) A method according to [any of the preceding claims] claim 1 including providing a local oscillator for determining the Doppler shifts.
7. (Amended) A method according to [any of the preceding claims] claim 1 wherein a portion of the illuminating radiation is used as a local oscillator in detecting Doppler shifts.
9. (Amended) A method according to claim 7 [or claim 8] wherein the local oscillator comprises radiation back diffracted from a diffracting surface.
10. (Amended) A method according to [any of claims 6-9] claim 6 wherein the local oscillator is focused on a sensor used to detect the Doppler shifts.
12. (Amended) A method according to [any of the preceding claims] claim 1 wherein the position is comprised in an area illuminated by radiation, said area comprising an entrance side at which a sheet enters the area and an exit side at which the sheet leaves the area.
15. (Amended) A method according to [any of claims 12-14] claim 12 wherein the arrival of an edge is determined by Doppler energy produced at said entrance side of said area by a leading edge of said sheet.

16. (Amended) A method according to [any of claims 12-15] claim 12, wherein a trailing edge is determined by a cessation of detection of Doppler energy from said exit side of said position from a trailing edge of said sheet.

17. (Amended) A method according to [any of claims 12-16] claim 12 wherein the position has an extent between entrance and said exit side.

21. (Amended) A method according to [any of claims 12-20] claim 12 and including detecting the presence of a non-moving sheet between the entrance and exit.

22. (Amended) A method according to [any of claims 12-20] claim 12 and including measuring the velocity of the sheet.

23. (Amended) A method according to [any of claims 12-20] claim 12 and including measuring the distance the sheet translates.

24. (Amended) A method according to [any of claims 4-23] claim 4 wherein the radiation is IR radiation.

25. (Amended) A method according to [any of claims 4-24] claim 4 wherein the radiation is laser illumination.

26. (Amended) A method according to [any of the preceding claims] claim 1 wherein the time at which a sheet enters the position is determined to an accuracy better than about 0.5 mm/V sec, where V is the velocity of the sheet.